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09/488,469	01/20/2000	Yoshiharu Konishi	005317-20052	4483

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EXAMINER

WILLIAMS, KIMBERLY A

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/488,469

Applicant(s)

KONISHI ET AL.

Examiner

Melanie M Vida

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement(s) (IDS) submitted on 1/20/00 has been considered by the examiner and is attached to this office action.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

3. The abstract of the disclosure is objected to because of undue length. According to 37 CFR 1.72(b), an abstract is not to exceed 150 words in length when the application is filed under 35 U.S.C. 111. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 1 is missing the label for RAM (240) as disclosed in the specification, (pg. 25, line 29).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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5. The drawings are objected to because the power supply (290) in figure 1 has a connection line pointing towards an empty space in the tape printing apparatus (1). The connection appears to branch out into 4 parallel lines with arrows. The arrows point to a missing object. Hence there is nothing to terminate the connection.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 1-25** are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4-6, 11-18, 22-23, 26-28, 33, 35-40 of copending Application No. 09/487,503, (hereinafter, '503).

Although the conflicting claims are not identical, they are not patentably distinct from each other because in **claim 1**, the image forming method of forming a main image and a

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background image is not patentably distinct from the method in claim 1 ('503) for synthesizing a main image and a background image comprising the steps of storing, setting, forming a main image, forming an adjusted background image, and forming a synthesized image, and in claim 5 the steps of forming a shape of a main image, by assigning a validity-indicative one of predetermined two values to all pixels of said main shape image as said all valid pixels of said main shape image as said all valid pixels of said main image, and assigning an invalidity-indicative one of said predetermined two values to the remaining pixels of said main image.

**Claim 2**, the image forming method wherein said background image data candidates include image data items each representative of a dot image formed by inputting data of dots as desired, is identical to claim 4, ('503). **Claim 3**, the image forming method for the step of forming main shape image data item by inputting text data, and converting text data is identical to claim 5 ('503). **Claim 4**, the image forming method with predetermined font data is outline font data is identical to claim 6 ('503). **Claim 5**, the image forming method with a plurality of three, primary colors cyan, magenta, and yellow, is not patentably distinct from claim 11 ('503). **Claim 6**, the image forming method where the plurality of basic colors include a basic color corresponding to a mixed color of said three primary colors is identical to claim 12 ('503). **Claim 7** the image forming method wherein said synthesized image is formed as a print image printed on a printing object, which is identically recited in claim 13 ('503). **Claim 8** the image forming method where the printing object is tape, which is identically recited in claim 14, ('503). **Claim 9** the image forming method has a print image is printed by an ink jet printing method, which is identically recited to claim 15, ('503). **Claim 10** the image forming method has a plurality of basic colors include three primary colors, red, green, and blue, is identically recited in claim 16, ('503).

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**Claim 11** the image forming method comprising a synthesized image to be displayed on a display screen is identically recited in claim 17, ('503). **Claim 12**, the image forming method with the steps of determining whether or not an automatic main gradation value adjustment should be executed, and the step of setting a background image to the main image gradation value is not patentably distinct from claim 18 ('503) the step of determining whether or not the adjustment of said background gradation values should be executed, and the step of forming said synthesized image includes forming said synthesized image based on adjusted background image data when it is determined that the adjustment of said background gradation values should be executed. **Claim 13**, the image forming method comprising the steps of storing, selecting, setting, and forming a synthesized image is identical to the method in claim 22 ('503). **Claim 14** the image forming device for forming a main image and a background image comprising storage means, image-setting means, image gradation-value set-setting means, image data-forming means, and synthesized image data-forming means, is the same as the image forming device in claim 23 ('503). **Claim 15** the image forming device is identical to the device in claim 26 ('503). **Claim 16** the image forming device where the main shape data-forming means comprises text data-inputting means, and conversion means, are identical the main shape data-forming means components on claim 27, ('503). **Claim 17** the image-forming device includes predetermined font data; outline font data is identical to claim 28 ('503). **Claim 18** the image forming device where the plurality of basic colors include cyan, magenta, and yellow, is identically recited in claim 33 ('509). **Claim 19** the image forming device where a plurality of basic colors include a basic color corresponding to a mixed color of said three primary colors, is identically recited in claim 34 ('509). **Claim 20** the image forming device wherein the synthesized image is formed as

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a print image to be printed on a printing object is identically recited in claim 35 ('509). **Claim 21** the image forming device wherein the printing object is tape, is identically recited in claim 36 ('509). **Claim 22**, the image-forming device wherein the print image is printed by an ink jet printing method, is identically recited in claim 37, ('509). **Claim 23** the image-forming device where the plurality of basic primary colors are red, green, blue is identically claimed in claim 38, ('509). **Claim 24**, the image forming device, where the synthesized image is formed as a display image to be displayed on a display screen is identically claimed in claim 39, ('509). **Claim 25**, the image forming device, with adjustment determining means and main image gradation value set-setting means executes said automatic main gradation value adjustment to set one corresponding to said background image to said main image is identical to the image forming device in claim 40, ('509).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-6, 10-19, 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Adobe Photoshop 5.0 User Guide, 1998 (hereinafter, Adobe), and further in view of Henry R. Kang, "Digital Color Halftoning", (Date of Publication, 11/11/99), (hereinafter, Kang).

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Regarding, **claim 1**, the Adobe User Guide has a section teaching the user how to add a background to an image, an image forming method of forming a main image and a background image serving as a background of said main image”, (pg. 264, Section, “To add a background to an image”). Further, Adobe teaches steps in a method to synthesize a background image color with a main image color with a color sampler tool, and an eyedropper tool, color editing tools used to choose either the foreground or background colors for forming a synthesized image as shown in the figures, which reads on “by using colors each defined by a set of n-valued basic color gradation values each having any one of n possible values (n is an integer which is equal to or larger than 3) and defining a gradation value of a corresponding one of a predetermined set of basic colors, and synthesizing said main image and said background image to thereby form a synthesized image”, (pg. 214, Section “Choosing the foreground and background colors”, figures on pgs 233-234; Chapter 6, “Making Color and Tonal Adjustments”, pp. 105-109).

The Adobe User Guide has a section on Layers associated with each image, such as the zebra layer, lion layer, map layer, and a background layer corresponding to the illustrated figure, and teaches steps to construct composite images by editing different layers for each of a plurality of images, which reads on “storing a plurality of different data items respectively representative of candidates for said background image, as background image data candidates”, (pgs. 15-18, Section “Layers”, steps 1-21; see the figures on pg. 261-263). Adobe teaches that a new foreground or background color can be selected using the eyedropper tool, the Color palette, the Swatches palette, or the Photoshop Color Picker, which reads on “storing a plurality of different sets of said n-valued basic color gradation values, said different sets corresponding to respective ones of said background image data candidates, as candidates for a main image gradation value



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set of said n-valued basic color gradation values commonly applied to all valid pixels of said main image”, (pg. 214, “Choosing the foreground and background colors”; pp 215-222). To add a background to an image, a series of steps are explained in the Adobe User Guide, which reads on “setting an arbitrary one of said background image data candidates to a background image data item representative of said background image”, (pg. 264, Section “To add a background to an image”). A color picker tool is a GUI frame, in which a user can select a foreground color out of the complete set of colors in the foreground image, to change the background color, which reads in “setting, out of said candidates for said main image gradation value set, one corresponding to said background image represented by said background image data item to said main image gradation value set”, (pg. 214, “To change the foreground and background color”; pg. 218, “Using the Adobe Photoshop Color Picker”. Different blending modes a user can control how the pixels in the layer blend by a painting or editing tool, which reads on “forming a main image data item representative of said main image”, (pg. 205, “Selecting a blending mode”). As shown in the figures, a series of blending modes which let the user control how the pixels in the layer blend with the pixels in the underlying layer, which reads on “forming a synthesized image data item representative of said synthesized image by synthesizing said main image and said background image based on said adjusted background image data item and said main image data item”, (see the figures on pg. 234).

The Adobe User Guide does not expressly disclose “assigning a validity indicative one of predetermined two values to all pixels of said main shape image as said all valid pixels of said main image, and assigning an invalidity-indicative one of said predetermined two values to the remaining pixels of the main image”.

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However, Kang teaches a threshold array applied to four different input images to produce output binary bitmaps as illustrated in figure 13-37, which reads on “assigning a validity indicative one of predetermined two values to all pixels of said main shape image as said all valid pixels of said main image, and assigning an invalidity-indicative one of said predetermined two values to the remaining pixels of the main image”, (page 251, see figure 13-37).

At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the Adobe User Guide image forming method with the assigning of a threshold array to four different input images, as recited in Kang.

One of ordinary skill in the art would have been motivated to have an assigning step with Adobe’s image forming method in order to halftone an image digitally, given the express suggestion of Kang in figure 13-37, (page 251).

Regarding, **claim 2**, the Adobe User Guide teaches a method to reposition multiple layers in a composite image, among such layers, for example, as the Africa layer, map layer, and the background layer, as shown in the figure, which reads on “wherein said background image data candidates include image data items”, (pg. 266, Section “To reposition multiple layers”, and see the figure, pg. 270). As illustrated in the figures, text created by a type tool, and by a type mask tool, can be inserted as a type of layer on a background, which reads on “each representative of a dot image formed by inputting data of dots as desired”, (see the figures on pg. 292).

Regarding, **claim 3**, the Adobe User Guide teaches the image forming method according to claim 1. Further, the Adobe User Guide teaches of inputting text data as an upper layer over a background, as shown in the figure, which reads on “inputting text data as a source of said main image”, (pg. 292, Section on “Entering text”). The Adobe User Guide teaches that font can be

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specified by the user in a type tool as illustrated by the label “Size” in the figure, and a text area where the cursor is positioned, which reads on “converting said text data into image data based on predetermined font data”, (pg. 292). Finally, the text image is inserted over a background as it appears in the image, “Pasta” over a noodle-laden background, which reads on “to thereby form a main shape image data item”, (see the figures on pg. 293).

Regarding, **claim 4**, the Adobe User Guide inherently teaches “wherein said predetermined font data is outline font data” as evidenced by a font family of a particular typeface design that can be chosen by a user via a user-interface, and that additional fonts may be installed on the system using font files in the local Font folders, (pg. 295, section “Choosing a font family”).

Regarding, **claim 5**, the figure in the Adobe User Guide has a user operated CMYK slider for adjusting or editing the color values of a foreground and background image, which reads on “said plurality of basic colors include three primary colors, said three primary colors being cyan, magenta, and yellow”, (pg. 215, section “Using the Color Palette”, see the figure on pg. 215).

Regarding, **claim 6**, the figure illustrated in the Adobe User Guide has a user operated RGB slider(s), can be adjusted for the foreground (A), and the background (B) by moving the slider to any value such as the example shown, red value=240, the blue value = 87, and the green value=36, which reads on “plurality of basic colors include a basic color corresponding to a mixed color of said three primary colors”, (see the figure on pg. 215).

Regarding, **claim 10**, the figure illustrated in the Adobe User Guide has a user operated RGB slider(s), can be adjusted for the foreground (A), and the background (B) by moving the slider to any value such as the example shown, red value=240, the blue value = 87, and the green

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value=36, which reads on “plurality of basic colors include a basic color corresponding to a mixed color of said three primary colors”, (see the figure on pg. 215).

Regarding, **claim 11**, the Adobe User Guide inherently teaches “said synthesized image is formed as a display image to be displayed on a display screen”, as evidenced by the Adobe User Guide, as evidenced by the synthesized image comprising a zebra overlaying a map layer and a background, with a user interface for editing layers, (pg. 277, see the figures).

Regarding, **claim 12**, the Adobe User Guide teaches the image forming method according to claim 1. Further, step by step instructions on how to change the background color by selecting the bottom layer in the image, and/or changing the foreground color, which reads on “the step of determining whether or not the automatic main gradation value adjustment should be executed to automatically set said one corresponding to said background image represented by said background image data item to said main image gradation value set”, (pg. 214, Section “To change the foreground or background color”, step 1-2). Further, Adobe User Guide illustrates a photograph of a zebra synthesized on a map image, by specifying an opacity value for the zebra layer, which reads on “wherein the step of setting said one corresponding to said background image represented by said background image data item to said main image gradation value set”, (pg. 271, “Specifying Opacity”, pg. 271). Further, Adobe inherently teaches, includes executing said automatic main gradation value adjustment to automatically set said one corresponding to said background image represented by said background image data item to said main image gradation value set when it is determined that said automatic main gradation value adjustment should be executed”, as evidenced by the aforementioned teachings and further

where the corresponding commands can be automated by choosing File>Automate above, (pg. 358, "Using the Automate commands" and "External automation").

Regarding, **claims 13-14**, please refer to the corresponding rejection for claim 1.

Regarding, **claim 15**, please refer to the corresponding rejection for claim 2.

Regarding, **claim 16**, please refer to the corresponding rejection for claim 3.

Regarding, **claim 17**, please refer to the corresponding rejection for claim 4.

Regarding, **claim 18**, please refer to the corresponding rejection for claim 5.

Regarding, **claim 19**, please refer to the corresponding rejection for claim 6.

Regarding, **claim 23**, please refer to the corresponding rejection for claim 10.

Regarding, **claim 24**, please refer to the corresponding rejection for claim 11.

Regarding, **claim 25**, please refer to the corresponding rejection for claim 12.

9. **Claims 7-9, 20-22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Adobe Photoshop 5.0 User Guide, 1998 (hereinafter, Adobe User Guide), and further in view of Henry R. Kang, "Digital Color Halftoning", (Date of Publication, 11/11/99), as applied to claim 1 and 14, respectively, above, and further in view Hayama USP 6,532,078, (hereinafter, Hayama).

Regarding, **claim 7**, the Adobe User Guide in view of Kang teaches the image forming method in claims 1, and 14, respectively. Further the Adobe User Guide in view of Kang teaches steps as in claim 1 and 14, for creating a main image with a background image.

The Adobe User Guide in view of Kang fails to expressly teach that the "is formed as a print image to be printed on a printing object".

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However, as shown in figure 11, Hayama teaches that the character string image “IMAGINARY TAPE WIDTH for User’s Designation” is printed on printing tape, which reads on “is formed as a print image to be printed on a printing object”, (col. 19, lines 54-56).

At the time the invention was made, it would have been obvious to use a method for creating synthesized images as taught by the Adobe User Guide in view of Kang, and a method to print on printing tape as in Hayama’s teachings.

One of ordinary skill in the art would have been motivated to created synthesized images with Hayama’s method for printing on tape, in order to prepare a label, given the express suggestion of Hayama, (col. 19, line 58).

Regarding, **claim 8**, please refer to the corresponding rejection in claim 7.

Regarding, **claim 9**, the print image is printed by an ink jet printing method is inherently taught by Adobe User Guide, as evidenced by the section “Converting the color space of images while printing” where the color space of an image is converted to gray scale, and the printer color management is selected to instruct the printer to convert the file data to the printer’s color space, (see pg. 338, Section, “Converting the color space of images while printing”, step 3-4).

Regarding, **claim 20**, please refer to the corresponding rejection for claim 7.

Regarding, **claim 21**, please refer to the corresponding rejection for claim 8.

Regarding, **claim 22**, please refer to the corresponding rejection for claim 9.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Hosokawa et al. US Pre-Grant Publication, US 2003/0058473 A1, a label producing method and apparatus.

Borg et al. USP 6,289,364, blending an object with a specified blend function using a foreground object and a background object.

Huang USP 6,175,663, figure 5, shows a composite, synthesized image with text, lines, and graphics.

Buxton et al. USP 6,118,427, a (GUI), graphical user interface for merging images or layers of objects onto the GUI.

Barber USP 6,507,361 B1, a means for combining foreground and background images with background images.

Itokawa USP 6,404,901 B1 a method to print a synthesized image.

Kurashina USP 6,293,717 B1, a tape printing apparatus and printing method.

Ueno et al. USP 6,062,750, a method for printing a background in addition to text on a tape along with a decorating feature to extend the border of the printed tape.

Nakagawa et al. USP 6,005,967 a picture synthesizing apparatus and method.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie M Vida whose telephone number is (703) 306-4220. The examiner can normally be reached on 8:30 am 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Melanie M Vida  
Examiner  
Art Unit 2697

*mmv*  
MMV

September 25, 2003

*KA Williams*  
**KIMBERLY WILLIAMS**  
**SUPERVISORY PATENT EXAMINER**